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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/035,073	12/28/2001	Chris J. Goodings	20011891	3971

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PILLSBURY WINTHROP SHAW PITTMAN, LLP  
P.O. BOX 10500  
MCLEAN, VA 22102

EXAMINER

DYKE, KERRI M

ART UNIT PAPER NUMBER

2667

DATE MAILED: 02/23/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/035,073	<b>Applicant(s)</b> GOODINGS, CHRIS J.	
	<b>Examiner</b> Kerri M. Dyke	<b>Art Unit</b> 2667	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 18 January 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 11-15 is/are allowed.
- 6) ☒ Claim(s) 1-10, 16 and 17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Priority***

1. Acknowledgment is made of applicant's claim for foreign priority based on an application filed in the United Kingdom on 12/29/2000. It is noted, however, that applicant has not filed a certified copy of the 0031812.1 application as required by 35 U.S.C. 119(b).
2. Acknowledgment is made of applicant's claim for foreign priority based on an application filed in the United Kingdom on 12/29/2000. It is noted, however, that applicant has not filed a certified copy of the 0031817.0 application as required by 35 U.S.C. 119(b).

### ***Response to Arguments***

3. Applicant's arguments, see page 12 paragraph 4 – page 13 paragraph 2 and page 14, filed 1/18/2006, with respect to claims 11-15 have been fully considered and are persuasive. The rejection of claims 1-15 has been withdrawn.
4. Applicant's arguments, see page 12 paragraph 4 – page 13 paragraph 2 and page 14, filed 1/18/2006, with respect to the rejection(s) of claim(s) 1-10 under 102 and 103 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of new Office Guidelines for statutory matter.
5. Applicant's arguments filed 1/18/2006, with respect to claims 16 and 17 have been fully considered but they are not persuasive.
  - a. It is noted that the features upon which applicant relies (i.e., each data frame contains two blocks of data, a primary block and a redundant block, where the contents of the redundant block are the same as the contents of the primary data period during the

preceding frame) are not recited in rejected claim 16. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Claim 16 states a first data frame with a first data block and a second data frame with a second data block. There is nothing within the claim to indicate the presence of two distinct data blocks within each frame. The use of the words first and second can be interpreted simply as a means to differentiate between the two frames. It does not indicate that each frame has both a first and second data block.

b. In respect to claim 17, the recitation “each data frame comprising a primary data period and a redundant data period, where the contents of the redundant data period are the same as the contents of the primary data period during the preceding frame” has not been given patentable weight because the recitation occurs in the preamble. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951).

### ***Claim Rejections - 35 USC § 101***

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-10 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claims 1-10 are directed to frame formats, which are data structures.

Art Unit: 2667

Data structures not claimed as embodied in computer-readable media are descriptive material per se and are not statutory because they are not capable of causing functional change in the computer. See, e.g., Warmerdam, 33 F.3d at 1361, 31 USPQ2d at 1760 (claim to a data structure per se held nonstatutory). If the frame is interpreted as a signal, it is still unstatutory because claims that recited nothing but the physical characteristics of a form of energy, define energy and as such are nonstatutory natural phenomena. O'Reilly, 56 U.S. (15 How.) at 112-14. Moreover, a claim reciting a signal encoded with functional descriptive material does not fall within any of the categories set forth in 101. The patentability guidelines can be found at the office website at:

[http://www.uspto.gov/web/offices/pac/dapp/opla/preognotice/guidelines101\\_20051026.pdf](http://www.uspto.gov/web/offices/pac/dapp/opla/preognotice/guidelines101_20051026.pdf).

Annex IV, beginning on page 50, is the computer related section.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claim 16 is rejected under 35 U.S.C. 102(b) as being anticipated by Pandula (WO 95/34960), which was supplied by the applicant.

7. In regards to claim 16, Pandula discloses redundantly transmitting a data frame which includes error detection information on page 3 line 1 – page 4 line 21. The specific use of error detection bits is mentioned on page 14 lines 27-28. Page 14 lines 4-25 describe a method for

Art Unit: 2667

using the error detection bits for determining if the data was received with errors. If the data has errors it is not stored but discarded. If the data does not have errors it is stored and marked for further transmission or output. This is also described in a different embodiment on page 17 line 15 – page 19 line 34.

***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Haartsen (WO 00/70811) in view of Fischer (US 5,371,734).

10. In regards to claim 17 Haartsen discloses the method of claim 1 including sending a first block of data during a primary send period and sending a second block of data which is a copy of the first block during a secondary send period. Haarsten et al. does not disclose measuring the battery level and transmitting/receiving the redundant block only if the level is above a threshold value.

Fischer discloses powering down the transmitter and receiver to save battery life in column 5 lines 28-32. In column 28 lines 38-43 it is disclosed that the decision can be based upon the amount of battery power remaining.

Fischer is analogous art because it is directed to solving the problem of conserving battery power in both the transmitter and the receiver.

It would have been obvious to one of ordinary skill in the art to use the power saving technique taught by Fischer within the redundant transmission system of Haartsen, because remaining active at all times or for sending and receiving unnecessary/redundant data is a great drain on battery life, as disclosed by Fischer in column 4 line 56 – column 5 line 3.

*Allowable Subject Matter*

11. Claims 11-15 are allowed.

12. The following is a statement of reasons for the indication of allowable subject matter: As the applicant pointed out, the data frame of the instant invention includes two separate sections. The first is comprised on new data. The second is comprised of redundant data, but it is not a copy of the data in the first section of the current frame. It is a copy of the data sent in the first section of the previous frame. The prior art does not teach nor in combination suggest sending new and redundant data within the same transmission frame.

- a. Haartsen discloses redundant transmission (for example timeslots 407, 411 of figure 5A). After a frame of new information is sent, a frame of redundant information is sent. The redundant transmissions, however, are not part of a data frame that also contains new information.
- b. Pandula also discloses a redundant transmission scheme, but again, does not disclose the redundant data being included within a frame that also contains new data.
- c. Hamalainen discloses sending multiple blocks per frame (see figure 2). However, there is no teaching or suggestion about the contents of the multiple blocks. There is no reason to think the blocks would be used to transmit both new and redundant data within the same frame.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kerri M. Dyke whose telephone number is (571) 272-0542. The examiner can normally be reached on Monday through Friday, 7:00 am - 3:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi Pham can be reached on (571) 272-3179. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

kmd



**CHAU NGUYEN  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600**